ATTACHMENT J7

RICHMOND IAP (ANG) Wastewater Collection System

Table of Contents

RICHMOND IAP (ANG) WASTEWATER COLLECTION SYSTEM	l
J7 RICHMOND IAP (ANG) WASTEWATER COLLECTION SYSTEM	1
J7.1 RICHMOND IAP (ANG) OVERVIEW	1
J7.2 WASTEWATER COLLECTION SYSTEM DESCRIPTION	3
J7.2.1 Wastewater Collection System Fixed Equipment Inventory	
J7.2.1.1 Description	
J7.2.1.2 Inventory	
J7.2.2 Wastewater Collection System Non-Fixed Equipment and Specialized Tools	5
J7.2.3 Wastewater Collection System Manuals, Drawings, and Records	6
J7.3 SPECIFIC SERVICE REQUIREMENTS	
J7.4 CURRENT SERVICE ARRANGEMENT	6
J7.5 SECONDARY METERING	6
J7.6 MONTHLY SUBMITTALS	6
J7.7 INFILTRATION AND INFLOW (I&I) PROJECTS	7
J7.8 SERVICE AREA	7
J7.9 OFF-INSTALLATION SITES	
J7.10 SPECIFIC TRANSITION REQUIREMENTS	7
J7.11 GOVERNMENT RECOGNIZED SYSTEM DEFICIENCIES	7
List of Tables	
Fixed Inventory	4
Spare Parts	
Specialized Vehicles and Tools	
Manuals, Drawings, and Records	
Service Connections and Disconnections	7
System Deficiencies	7

J7 RICHMOND IAP (ANG) Wastewater Collection System

J7.1 RICHMOND IAP (ANG) Overview

The 192nd Fighter Wing is located at Richmond IAP (ANG)) at Richmond International Airport in Sandston Virginia. The base consists of 143 acres and 64 buildings (295,646 SF). It is surrounded by residential areas to the north and northeast. To the west and south lies the airport operating surfaces and airport owned wetlands are to the east. It is home to 294 officer and enlisted personnel and surges to 1000 personnel one weekend a month.

The history of the 192nd FW stretches back to World War II. In May 1946, the Pentagon reactivated and redesignated the 328th Fighter Squadron, a heroic WWII unit. The 328th had been organized at Mitchell Field, New York, on Oct. 10, 1942, and saw action in the European theater. Battle honors included a Presidential Unit Citation and the French Croix de Guerre with Palm. Newly designated as the 149th Fighter Squadron, the unit was assigned to the Virginia Air National Guard, which earned official recognition from the National Guard Bureau in June 1947. The 149th Fighter Squadron was entitled to the history, honors, and colors of the 328th. The unit's first aircraft was the F-47 Thunderbolt. The unit was called to active federal service on March 1, 1951. This activation temporarily resulted in the dissolution of the Virginia Air National Guard, as members were sent to various places, including for many, duty in the Korean War. The Virginia Air National Guard was reorganized in November 1953 as a B-26 bomber outfit. In 1957, the unit was redesignated the 149th Fighter Interceptor Squadron and was scheduled to get F-86E Saberjets. However, later that year, the unit became the 149th Tactical Fighter Squadron, and F-84F Thunderstreaks began replacing the B-26.

At the height of the Cold War in 1961, the squadron was federalized as a result of tensions concerning the Berlin Wall. The squadron remained at Richmond in an active-duty status for about a year before being released. Twenty-two Virginia ANG members were sent to Chaumont RICHMOND IAP (ANG), France, in December 1961 to support the 7180th Tactical Fighter Wing, a deployed unit of the 108th Tactical Fighter Wing. They spent eight months in Europe. In October 1962, the unit was redesignated as the 192nd Tactical Fighter Group, with the 149th TFS becoming the group's flying squadron. Other squadrons in the group were the 192nd Group Headquarters, 192nd Materiel Squadron (Maintenance), 192nd Combat Support Squadron, and the 192nd USAF Dispensary. During 1971, the 192nd was assigned the F-105D Thunderchief, a battle-hardened supersonic fighter-bomber that was the backbone of America's fighter element during the Vietnam War. The group's special tasking during the next 10 years included several deployments to Red Flag live-fire exercises in Nevada and a deployment to RAF Lakenheath, England, in 1976.

In 1981, the unit began converting to the Vought A-7D Corsair II, a subsonic jet designed primarily for close-air support. The 10-year A-7 era included several deployments to

Panama in support of the defense of the Panama Canal and two trips to Norway – in 1985 and 1989. The year 1985 was a particularly busy one internationally for the 192nd. Shortly after finishing a deployment to Ecuador, the 192nd deployed in September to Evenes Air Station, Norway, 150 miles above the Arctic Circle. A few weeks later, a Virginia contingent competed in Gunsmoke '85, the Air Force's tactical fighter competition, and the 192nd was named the world's "Best A-7 Unit." The 192nd also earned the General Spruance Safety Award and was recognized as having had the best Operational Readiness Inspection in the Ninth Air Force during 1985. That string of accomplishments helped the 192nd earn its firstever USAF Outstanding Unit Award, which was presented in 1987. The unit soared into a new era of aviation technology in 1991, when it became the first Air National Guard unit to receive the Air Force's upgraded Fighting Falcon -- The F-16C/D. The unit was initially assigned 24 single-seat F-16C models and two F-16D models. By early 1994, defense cutbacks had reduced the unit's assigned inventory to 18 F-16s, and eventually to 15. Conversion to the F-16 airframe required the 192nd to build a \$2 million "hush house," a special noise-suppression hangar in which the jets' engines could be tested without bothering neighbors. The 192nd's designation shortened during 1992 -- from 192nd Tactical Fighter Group to 192nd Fighter Group. This change reflected the retirement of the former Tactical Air Command and creation of the multi-role mission of the new Air Combat Command. After the 192nd FG became fully operational with the F-16, it was chosen as the lead unit in a four-state Air National Guard F-16 "rainbow" detachment deployed to Incirlik Air Base, Turkey, to support Operation Provide Comfort II. During that operation between Dec. 1, 1993, and Jan. 15, 1994, ANG pilots patrolled the no-fly zone over northern Iraq to prevent Iraqi forces from inflicting damage on the villages of Kurdish minorities. This was the first time Air National Guard units had been called to active duty to serve in a peacekeeping role in the Mideast, following Iraq's defeat in 1991. The unit returned to Incirlik in February 1996 for another round of patrols over Iraq. During October 1995, the 192nd's designation was again slightly modified to reflect unit restructuring within the Air Force and Air National Guard. This time the unit designation was changed from 192nd Fighter Group to 192nd Fighter Wing. In addition to its customary mission of training for war, the 192nd performed as a test base for higher headquarters by taking on two new, diverse projects in 1995. At the direction of the commander of Air Combat Command, in January the 192nd became a test regional repair center for F-16 engines. The 18-month assignment called for the 192nd propulsion section to strip and rebuild General Electric F110-GE-100 engines for its own F-16s as well as for F-16s assigned to Pope RICHMOND IAP (ANG), NC. With Pope designated to become a composite wing with several types of aircraft, ACC officials sought more efficient and economical ways of providing maintenance for its F-16 engines. By setting up a regional repair center at the 192nd, the Air Force aimed to reduce the number of F-16 maintenance people needed in this region, consolidate their training, reduce duplication of resources and equipment, and lower maintenance costs per flying hour. While that project was underway, the 192nd was selected to evaluate and bring on line a new, portable reconnaissance pod designed for F-16s to take on the added mission of aerial reconnaissance. The RF-4C, which had been the Air Force's manned reconnaissance aircraft, was retired in October 1995. The Air Force initially decided to discontinue its manned reconnaissance program but reversed itself. To provide maximum flexibility, it decided to see whether reconnaissance pods could be added to fighter aircraft, giving operational units the additional function of reconnaissance. The 192nd Fighter Wing was selected to test the capability of electro-optical "recce" pods. After becoming mission

capable with the pods in April 1996, the fighter wing deployed to Aviano AB, Italy, in May 1996 for the first real-world contingency use of the new pods and computerized imaging equipment. For 45 days, the 192nd FW flew "recce" missions over Bosnia, in support of international peacekeeping efforts there.

Due to the unit's many unique and high profile accomplishments and high-caliber results during an Air Force Quality Assessment during 1996, the wing was awarded its second Air Force Outstanding Unit Award in December '96. 1997 marked the 50th anniversary of the Virginia Air National Guard.

J7.2 Wastewater Collection System Description

J7.2.1 Wastewater Collection System Fixed Equipment Inventory

The Richmond IAP (ANG) Wastewater Collection System consists of all appurtenances physically connected to the collection system from the point of demarcation defined by the Right of Way. The system may include, but is not limited to, pipelines, manholes, lift stations, valves, controls, treatment plants, and meters. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

J7.2.1.1 Description

The Richmond-ANG Base wastewater collection system is comprised of approximately 8,900 linear feet of sewer pipes ranging from 2 to 8 inches in diameter on service lines connecting to a 24 inch main that is owned by the Richmond Airport Authority and not part of the privatized system. System uses 3 in-ground lift stations. Two of the lift stations are 3 years old and one is 4 years old. Two pumps are 3 hp rated at 60 gpm and one is ½ hp rated at 20 gpm. There are a wide range of ages in the system from 41 years old to recently installed, however, even the oldest pipes and manholes inspected are in good to very good condition. Average depth of the pipes is 6 to 8 feet. The base has no sewage treatment facilities, septic tanks, storage tanks, nor leach fields. System has 31 manholes that are of precast construction and considered to be in average condition. There are several oil water separators and one kitchen grease trap that are not included in the privatization and are considered part of the facility creating the discharge.

J7.2.1.2 Inventory

Table 1 provides a general listing of the major Wastewater Collection System fixed assets for the RICHMOND IAP (ANG) Wastewater Collection System included in the sale.

TABLE 1 Fixed Inventory Wastewater Utility System RICHMOND IAP (ANG)

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
PVC Pipe	3.00	180	LF	1977
	3.00	70	LF	1984
	3.00	435	LF	1996
	4.00	80	LF	1977
	4.00	77	LF	1998
	4.00	90	LF	1999
	6.00	252	LF	1996
	6.00	151	LF	1998
	8.00	421	LF	1987
	8.00	225	LF	1996
	8.00	400	LF	1998
	8.00	220	LF	1999
Cast Iron Pipe	2.00	6	LF	1997
	3.00	75	LF	1987
	3.00	100	LF	1997
	4.00	5	LF	1983
	4.00	84	LF	1997
	6.00	40	LF	1970
	6.00	5	LF	1971
	6.00	56	LF	1997
Cement Asbestos Pipe	3.00	205	LF	1999
	6.00	394	LF	1977
	6.00	124	LF	1978
	6.00	350	LF	1982
Vitrified Clay Pipe	4.00	113	LF	1959
	6.00	295	LF	1959
	8.00	725	LF	1959
ACP, Concrete	6.00	100	LF	1968
	6.00	763	LF	1970
	6.00	205	LF	1974

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
	8.00	650	LF	1968
	8.00	600	LF	1974
	8.00	516	LF	1977
Ductile Iron	4.00	68	LF	1987
	4.00	23	LF	1998
	6.00	151	LF	1978
	6.00	36	LF	1981
	6.00	143	LF	1983
	8.00	54	LF	1987
	8.00	413	LF	1998
Standard Sanitary Sewer Manholes				
- Precast 6 Foot		15	EA	1980
- Precast 8 Foot		16	EA	1980
Wastewater In-Ground Lift Station				
- w/2, 60 gpm, 3 hp, submersible pumps		1	EA	1996
- w/1, 20 gpm, $\frac{1}{2}$ hp, submersible pump		1	EA	1997
- w/2, 60 gpm, 3 hp, submersible pumps		1	EA	1997

Notes:

PVC = Polyvinyl Chloride

LF = Linear Feet

EA = Each

J7.2.2 Wastewater Collection System Non-Fixed Equipment and Specialized Tools

Table 2 lists other ancillary equipment (spare parts) and Table 3 lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 2 Spare Parts

None

Wastewater Collection System RICHMOND IAP (ANG)

TABLE 3 Specialized Vehicles and Tools Wastewater Collection System RICHMOND IAP (ANG)	Qty	Item	Make/Model	Description	Remarks
Specialized Vehicles and Tools	None				
	Specialized Ve		HMOND IAP (ANG)		
Description Quantity Location Mal	De	escription	Quantity	Location	Maker

J7.2.3 Wastewater Collection System Manuals, Drawings, and Records

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4Manuals, Drawings, and Records
Wastewater Collection System RICHMOND IAP (ANG)

Qty	ltem	Description	Remarks
1	Maps	Distribution System	AUTOCAD Release 14

J7.3 Specific Service Requirements

The service requirements for the RICHMOND IAP (ANG) Wastewater Collection System are as defined in the Section C, *Description/Specifications/Work Statement*.

J7.4 Current Service Arrangement

Richmond IAP (ANG) Wastewater Collection System is maintained by Virginia ANG personnel.

J7.5 Secondary Metering

None.

J7.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

- 1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to the address provided at the time of award.
- 2. Outage Report. The Contractor's monthly outage report (blockage and overflow information) will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the address provided at the time of award.
- 3. Infiltration and Inflow Report. If required by Paragraph C.3, the Contractor shall submit an Infiltration and Inflow report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to the address provided at the time of award.

J7.7 Infiltration and Inflow (I&I) Projects

IAW Paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for managing and monitoring I&I.

None.

J7.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the RICHMOND IAP (ANG) boundaries.

J7.9 Off-Installation Sites

There is one off-installation site; a small munitions storage area $1 \frac{1}{2}$ miles from the base on an Army Guard site. Annual wastewater production is minimal.

J7.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 5** provides a listing of service connections and disconnections required upon transfer.

TABLE 5

Service Connections and Disconnections
Wastewater Collection System RICHMOND IAP (ANG)

Location	Description
None	

J7.11 Government Recognized System Deficiencies

Table 6 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the RICHMOND IAP (ANG) Wastewater Collection System. If the utility system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered. Renewal and Replacement projects will be recovered through Sub-CLIN AC.

TABLE 6

System Deficiencies

Wastewater Collection System RICHMOND IAP (ANG)

Project Location	Project Description
None	